PHARMACEUTICAL COMPOSITIONS FOR ORAL ADMINISTRATION COMPRISING LITHIUM CARBONATE, PROCESSES OF MAKING THE SAME , AND METHODS OF ADMINISTERING THE SAME

ABSTRACT OF THE DISCLOSURE

The present invention pertains to a controlled release solid dose formulations of lithium carbonate, comprising lithium carbonate, optional pharmacologically acceptable excipients, lubricants including stearic acid, sodium stearyl fumerate, calcium stearate, and magnesium stearate, optionally glycine, and sodium carboxymethylcellulose. Tablet forms are compressed at various pressures. The sodium carboxymethylcellulose and optionally glycine increases the dissolution rate profiles for lithium carbonate formulations, particularly for those formulations stored for extended periods of time and at varying conditions of heat and humidity. A process of formulating such compositions, comprising the steps of mixing lithium carbonate with excipients, top spraying a solution of sodium carboxymethylcellulose and glycine onto the lithium mixture in a fluid bed granulator, milling, and pressing the resultant compound into tablets is also described. The formulations of the invention are useful in a method of treatment of Bipolar Disorder (Manic Depressive Disorder).